



User Manual

In Vehicle Drop-In Charger for Harris® Radio

*Two way radio not included



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In Vehicle Drop-In Charger consists of:

- 1. Part # AT2502A Drop-In Charger
- 2. Part # AT8232A Power Cable
- 3. Part # 510-0016 Hardware Kit

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■ IMPORTANT NOTES

Before beginning the installation process, determine the best locations for the mounting of the **vehicular charger**.

Consider the following guideline when planning the installation:

- **DO** use all mounting hardware provided.
- **DO** ensure that cables are not placed under stress.
- **DO** follow proper + and $\ominus$ connections.
- **DO** crimp connectors securely.
- **DO NOT** attach components to any part of the vehicle that is not rigid or is subject to excessive vibration.
- **DO NOT** install components in areas where rain or snow can easily get into them, such as next to a vehicle window, which may be left open.
- **DO NOT** dress cables over sharp edges that could cause wear or tearing of cable insulation.
- **DO NOT** install components in locations where they might interfere with the vehicle operator or operating controls.
- **DO NOT** install the In-Vehicle Drop-In Charger where it will be difficult for the operator to reach.



WARNING

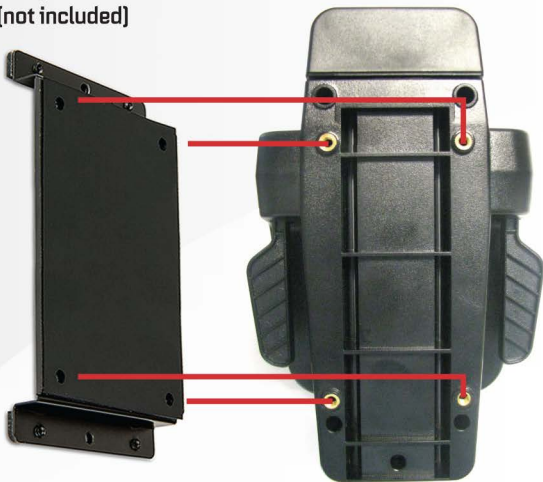
VEHICLES EQUIPPED WITH AIR BAGS

An air bag inflates with great force. **DO NOT** place objects, including communications equipment, in the area over the air bag or in the air bag deployment area. If the charging equipment is improperly installed and the air bag inflates, this could cause serious injury.

It is recommended that the installation of the vehicle charging equipment be performed by a professional installer/technician trained in the requirements for such installations. An air bag's size, shape and deployment area can vary by vehicle make, model, and front compartment configuration (for example, bench seat vs. bucket seats). Contact the vehicle manufacturer's corporate headquarters, if necessary, for specific air bag information for the vehicle make, model, and front compartment configuration involved in your charging equipment installation.

Diagram 1

**Mounting Bracket
(not included)**



A. IN-VEHICLE DROP-IN CHARGER INSTALLATION

1. Mount the In-Vehicle Drop-In Charger to mounting plate (mounting bracket or plate not included). Using the mounting plate template in diagram 2, drill the necessary mounting holes and secure the bracket with screws provided.
2. Remove secure pouch from release lever on the side of In-Vehicle Drop-In Charger. (Diagram 3).

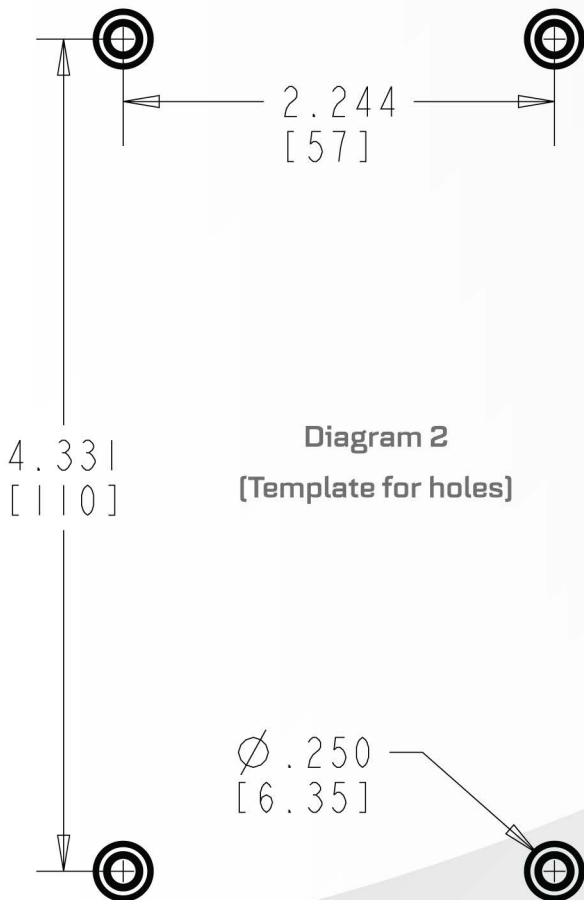
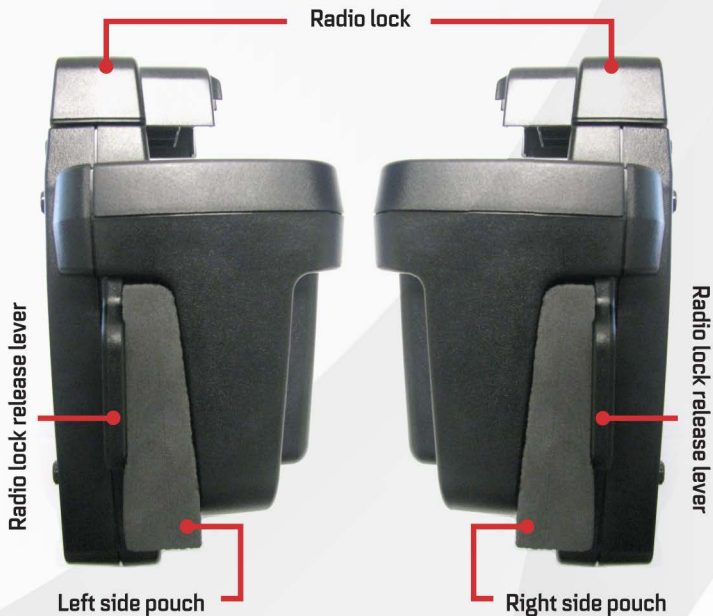


Diagram 2
[Template for holes]

Diagram 3



Caution! When removing the secure pouch from release lever, don't have face near radio lock lever it will pop out fast when release lever is pressed and can cause injury.

Diagram 4

Power Cable



D. INSTALLING THE POWER CABLE



Caution! The Car kit should be used with a negative ground electrical system only. Reverse polarity (positive ground) will trigger protection circuits which cause the cable fuse to open. Check the ground polarity before you begin the installation to prevent wasted time and effort. 12V DC or 24V DC automotive systems are directly supported. Determine the best cable route to the vehicle ignition for the Power Cable from the location where you intend to mount the Junction Box.

1. Route the black lead of the main power cable to a convenient chassis ground and the red lead to the positive supply voltage connection point. If it is necessary to penetrate the firewall, try to use an existing opening.
2. If there is no existing opening, drill a new hole approximately 9/16" or 3.5cm in diameter. Make sure that there is clearance on the opposite side. Insert a grommet into the hole to prevent damage to the power cable. When making connections on the engine side of the firewall, additional inline fuse holder (included) should be used at the connection points.

Diagram 5

(12VDC) ON/OFF (Ignition)

To Vehicle Radio Stereo MUTE

To Vehicle ground System

To Vehicle Supply Voltage



In Line Fuse

GREEN MUST GO TO IGNITION OR CONNECTED WITH RED

3. Cut the black lead to the desired length.
4. If the connection is being made under the dash or in the vehicle cabin, connect the black lead directly to the chassis of the vehicle.
5. If the connection is being made in the engine compartment, connect the in-line fuse holder between the black lead of the power cable and the desired chassis connection point.



Note! Do not connect the black lead to the negative (⏻) battery terminal. The Car Kit could be damaged if there were a malfunction in the vehicle's electrical system.

6. Cut the red lead to the desired length. This lead will be connected such that it has positive supply voltage at all times, even when the vehicle is turned off.

7. If the connection is being made under the dash or in the vehicle cabin, connect the red lead to a positive supply voltage point.
8. If the connection is being made in the engine compartment or directly to the battery, connect the in-line fuse holder between the red lead of the power cable and the desired positive voltage connection point.
9. Route and connect the green lead to a convenient ignition switch supply point in the vehicle. If the green lead is not being connected to the ignition, it MUST be connected together with the red lead.



Note! An ignition switch accessory terminal can be verified by measuring the terminal while operating the vehicle's key switch. With the ignition key in the "accessory ON" position, the terminal voltage should measure the vehicle's battery voltage. With the switch in the "OFF" position, it should measure near zero

Diagram 6



CONNECTING POWER CABLE TO IN-VEHICLE DROP-IN CHARGER

1. Connect the power cable connector to the bottom of the In-Vehicle Drop-In Charger. (Diagram 6).

Diagram 7

2. Radio lock will open



1. Press to
release lever



4. Push lock down
to secure radio



3. Insert
Radio



INSERTING AND REMOVING THE RADIO THE CHARGER

1. Press release lever on side of charger.
2. Radio lock lever will pop open.
3. Insert radio into charger.
4. Push radio lock down towards radio until secure.
5. To remove radio press on release lever and remove radio





Caution! Push down lock is spring loaded. Ensure no body parts are close to engaging or disengaging lock feature lever. **DO NOT** use lever without radio in place - injury may occur...

CAR IGNITION CONNECTION

1. When the car ignition is ON, the Charger will stay on.
2. When the ignition is turned OFF the Charger will turn OFF.

CHARGING THE BATTERY

1. On stand by LED light will blink red.
2. With radio inside the charger the light will blink green if charging. The light will be solid green once charge is complete. (Diagram 8).



NOTE! Batteries will charge within the temperature window of $\pm 10^{\circ}\text{C}$ to $+40^{\circ}\text{C}$ (50°F to 104°F). If the battery is outside the temperature window, no charge current will be supplied to the battery.

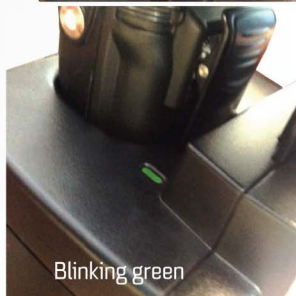
OPERATING SPECIFICATIONS

Input voltage range:	12V dc to 24V dc
Operating ambient:	$\pm 30^{\circ}\text{C}$ to $+60^{\circ}\text{C}$

Diagram 8



Status
Indicator





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